



# Product Evaluation

RC542 | 0617

Engineering Services Program

*The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).*

*This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.*

*This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.*

*For more information, contact TDI Engineering Services Program at (800) 248-6032.*

**Evaluation ID:** RC-542

**Effective Date:** June 1, 2017

**Re-evaluation Date:** May 2021

**Product Name:** Derbigum Performance Modified Bitumen Roofing Systems

**Manufacturer:** Derbigum Americas, Inc.  
4800 Blue Parkway  
Kansas City, MO 64130  
(800) 727-9872

## General Description:

- **Bitutak MB** is an APP polymer modified bitumen polyester reinforced membrane.
- **Bitutak MB Mineral** is an APP polymer modified bitumen polyester reinforced membrane.
- **Derbibase** is an APP modified bitumen glass fiber base sheet for mechanical attachment or Permastic cold adhesive application.
- **Derbigum GP** is a modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
- **Derbigum GP-FR** is a fire resistant modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
- **Derbipure** is a bitumen free waterproofing membrane reinforced with fiberglass/polyester with acrylic coating.
- **Derbicolor P-FR** is a mineral surfaced fire resistant modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
- **Derbicolor GP-FR** is a mineral surfaced fire resistant modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
- **Derbibrite** is a modified bitumen membrane reinforced with fiberglass/polyester with acrylic coating.

**General Description (Continued):**

- **Derbigum XPS** is a modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
- **Derbigum XPS-FR** is a fire resistant modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
- **Derbicolor GP** is a mineral surfaced modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
- **Derbicolor XPS** is a mineral surfaced modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
- **Derbicolor XPS-FR** is a mineral surfaced fire resistant modified bitumen glass fiber and polyester reinforced membrane for torch application or Permastic cold adhesive application.
- **Derbibase Ultra** is an APP modified bitumen glass fiber base sheet for mechanical attachment of Permastic cold adhesive application.
- **Derbibase HV** is an APP modified bitumen membrane reinforced with polyester mat.
- **PRS Glass Ply IV** is an asphalt coated fiberglass ply sheet for use in hot-mop or mechanically fastened or Permastic cold adhesive application.
- **PRS Glass Ply VI** is an asphalt coated fiberglass ply sheet for use in hot-mop or mechanically fastened or Permastic cold adhesive application.

**Limitations and Installation:****General installation Requirements:**

All IRC and the IBC requirements must be satisfied and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

**For All applications:** Roof decks, in which this product is to be installed upon, shall be provided with positive drainage. A minimum roof slope after construction of 1/4" per foot is recommended.

Prime decks were required, in accordance with requirements and recommendations of the primer and deck manufacturer (if applicable). For re-roofing and re-cover applications, prime existing roof surfaces as necessary with an asphalt primer meeting ASTM D-41 specification and allow to dry prior to installing the Derbigum roofing system.

**The following notes apply to the systems outlined herein:**

1. The roof decking must meet or exceed the uplift requirements of the IRC and IBC along with applicable Texas Revisions adopted by TDI. Install as required for resistance to wind loads.
2. Roof framing members shall be spaced a maximum of 24" o.c.
3. Unless otherwise noted, insulation adhesive application rates are as follows. Ribbon or bead width is at the time of application; the ribbons/beads must expand as noted in the manufacturer's published instructions.
  - Hot asphalt at 20-40 lbs/square.
  - OMG OlyBond 500 Adhesive in continuous 3/4 to 1" wide ribbons, 12" o.c. using OMG PaceCart or SpotShot dispensing system. Note: OMG OlyBond 500 Green Adhesive may be used in any system listing OMG OlyBond 500 Adhesive.
4. Unless otherwise noted, all insulations are flat stock or taper board of the minimum thickness noted.
5. Unless otherwise noted, refer to the following references for bonded base, ply or cap sheet applications.

APPENDIX 1: ATTACHMENT REQUIREMENTS FOR WIND UPLIFT RESISTANCE					
Table	Deck	Assembly No.	Application	Description	Page
2	Concrete	C-1	New or Reroof (Tear-Off)	Bonded Vapor Barrier, Bonded Insulation, Bonded Roof Cover	4
2 (Cont.)	Concrete	C-2 and C-3	New or Reroof (Tear-Off)	Bonded Vapor Barrier, Bonded Insulation, Bonded Roof Cover	5-6
2 (Cont.)	Concrete	C-4 through C-6	New or Reroof (Tear-Off)	Bonded Insulation, Bonded Roof Cover	7-9
2 (Cont.)	Concrete	C-7 through C-10	New or Reroof (Tear-Off)	Bonded Vapor Barrier, Bonded Insulation, Bonded Roof Cover	10-13

TABLE 1: DERBIGUM ROOF COVERS			
Reference	Layer	Material	Application
APP-TA (APP, Torch-Applied)	Base or Ply	Derbibase, Derbibase Ultra, Derbibase HV, Derbigum GP, Derbigum XPS, Bitutak MB	Torch-Applied
	Cap	Derbigum GP, Derbigum GP-FR, Derbigum XPS, Derbigum XPS-FR, Derbicolor GP, Derbicolor P-FR, Derbicolor GP-FR, Derbicolor XPS, Derbicolor XPS-FR, Derbibrite, Derbipure, Bitutak MB, Bitutak MB Mineral	

**Limitations and Installation:** Installation shall be in accordance with the following assemblies:

TABLE 2: DERBIGUM MODIFIED BITUMEN – NEW CONSTRUCTION OR REROOF (TEAR-OFF) CONCRETE DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Vapor Barrier		Insulation		Roof Cover <sup>1</sup>		
		Type	Attach	Base	Top	Base	Ply	Cap
#1 (C-1)	Structural concrete, primed with ASTM D41 primer	Derbibase	Torch applied	Min. 1-inch ACFoam-II, ACFoam-III, ENRGY 3 or ISO 95+ GL attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	Min. 1/4 inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board or min. 1/2 inch DuraBoard attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	APP-TA	(Optional) APP-TA	APP-TA
Design Pressure (psf)		Insulation Attachment						
-77.5		OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive in rows 12-inch o.c.						

**Footnote:**

1. For roof cover installation, refer to Table 1 above.

## Limitations and Installation (cont.):

TABLE 2 (CONTINUED): DERBIGUM MODIFIED BITUMEN – NEW CONSTRUCTION OR REROOF (TEAR-OFF) CONCRETE DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Vapor Barrier		Insulation		Roof Cover <sup>1</sup>		
		Type	Attach	Base	Top	Base	Ply	Cap
#2 (C-2)	Structural concrete, primed with ASTM D41 primer	Two or more, PRS Glass Ply IV or PRS Glass Ply VI	Hot asphalt	(Optional) Min. 1-inch ACFoam-II, ACFoam-III, ENRGY 3 or ISO 95+ GL attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	Min. 1/4 inch SECUROCK Gypsum-Fiber Roof Board or min. 1/2 inch DuraBoard attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	Derbibase, Derbibase Ultra, Derbibase HV or Bitutak MB	(Optional) APP-TA	APP-TA
Design Pressure (psf)		Insulation Attachment						
-130.0		OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive in rows 12-inch o.c.						

## Footnote:

1. For roof cover installation, refer to Table 1 above.

## Limitations and Installation (cont.):

TABLE 2 (CONTINUED): DERBIGUM MODIFIED BITUMEN – NEW CONSTRUCTION OR REROOF (TEAR-OFF) CONCRETE DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Vapor Barrier		Insulation		Roof Cover <sup>1</sup>		
		Type	Attach	Base	Top	Base	Ply	Cap
#3 (C-3)	Structural concrete, primed with ASTM D41 primer	Two or more, PRS Glass Ply IV or PRS Glass Ply VI	Hot asphalt	(Optional) Min. 1-inch ACFoam-II, ACFoam-III, ENRGY 3 or ISO 95+ GL attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	Min. 1/2 inch DuraBoard attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	Derbigum GP or Derbigum XPS	(Optional) APP-TA	APP-TA
Design Pressure (psf)		Insulation Attachment						
-130.0		OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive in rows 12-inch o.c.						

## Footnote:

1. For roof cover installation, refer to Table 1 above.

## Limitations and Installation (cont.):

TABLE 2 (CONTINUED): DERBIGUM MODIFIED BITUMEN – NEW CONSTRUCTION OR REROOF (TEAR-OFF) CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Vapor Barrier		Insulation		Roof Cover <sup>1</sup>		
		Type	Attach	Base	Top	Base	Ply	Cap
#4 (C-4)	Structural concrete	None	N/A	Min. 1-inch ACFoam-II, ACFoam-III, ENRGY 3 or ISO 95+ GL attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	Min. 1/4 inch SECURROCK Gypsum-Fiber Roof Board or min. 1/2 inch DuraBoard attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	APP-TA	(Optional) APP-TA	APP-TA
Design Pressure (psf)		Insulation Attachment						
-130.0		OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive in rows 12-inch o.c.						

## Footnote:

1. For roof cover installation, refer to Table 1 above.

## Limitations and Installation (cont.):

TABLE 2 (CONTINUED): DERBIGUM MODIFIED BITUMEN – NEW CONSTRUCTION OR REROOF (TEAR-OFF) CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Vapor Barrier		Insulation		Roof Cover <sup>1</sup>		
		Type	Attach	Base	Top	Base	Ply	Cap
#5 (C-5)	Structural concrete	None	N/A	Min. 1-inch ACFoam-II, ACFoam-III, ENRGY 3 or ISO 95+ GL attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	Min. ¼-inch DensDeck Prime attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	APP-TA	(Optional) APP-TA	APP-TA
Design Pressure (psf)		Insulation Attachment						
-160.0		OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive in rows 12-inch o.c.						

## Footnote:

1. For roof cover installation, refer to Table 1 above.

## Limitations and Installation (cont.):

TABLE 2 (CONTINUED): DERBIGUM MODIFIED BITUMEN – NEW CONSTRUCTION OR REROOF (TEAR-OFF) CONCRETE DECK, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Vapor Barrier		Insulation		Roof Cover <sup>1</sup>		
		Type	Attach	Base	Top	Base	Ply	Cap
#6 (C-6)	Structural concrete	None	N/A	Min. 1-inch ACFoam-II, ACFoam-III, ENRGY 3 or ISO 95+ GL attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	Min. 1/4 inch SECUROCK Gypsum-Fiber Roof Board or min. 1/2 inch DuraBoard attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	Derbigum GP or Derbigum XPS	(Optional) APP-TA	APP-TA
Design Pressure (psf)		Insulation Attachment						
-160.0		OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive in rows 12-inch o.c.						

## Footnote:

1. For roof cover installation, refer to Table 1 above.

## Limitations and Installation (cont.):

TABLE 2 (CONTINUED): DERBIGUM MODIFIED BITUMEN – NEW CONSTRUCTION OR REROOF (TEAR-OFF) CONCRETE DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Vapor Barrier		Insulation		Roof Cover <sup>1</sup>		
		Type	Attach	Base	Top	Base	Ply	Cap
#7 (C-7)	Structural concrete, primed with ASTM D41 primer	Two or more, PRS Glass Ply IV or PRS Glass Ply VI	Hot asphalt	Min. 1-inch ACFoam-II, ACFoam-III, ENRGY 3 or ISO 95+ GL attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	Min. 1/4 inch DenDeck Prime attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	APP-TA	(Optional) APP-TA	APP-TA
Design Pressure (psf)		Insulation Attachment						
-160.0		OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive in rows 12-inch o.c.						

## Footnote:

1. For roof cover installation, refer to Table 1 above.

## Limitations and Installation (cont.):

TABLE 2 (CONTINUED): DERBIGUM MODIFIED BITUMEN – NEW CONSTRUCTION OR REROOF (TEAR-OFF) CONCRETE DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER								
Assembly No.	Substrate	Vapor Barrier		Insulation		Roof Cover <sup>1</sup>		
		Type	Attach	Base	Top	Base	Ply	Cap
#8 (C-8)	Structural concrete, primed with ASTM D41 primer	Two or more, PRS Glass Ply IV or PRS Glass Ply VI	Hot asphalt	Min. 1-inch ACFoam-II, ACFoam-III, ENRGY 3 or ISO 95+ GL attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	Min. 1/4 inch SECUROCK Gypsum-Fiber Roof Board or min. 1/2 inch DuraBoard attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	Derbigum GP or Derbigum XPS	(Optional) APP-TA	APP-TA
Design Pressure (psf)		Insulation Attachment						
-160.0		OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive in rows 12-inch o.c.						

## Footnote:

1. For roof cover installation, refer to Table 1 above.



**Limitations and Installation (cont.):**

<b>TABLE 2 (CONTINUED): DERBIGUM MODIFIED BITUMEN – NEW CONSTRUCTION OR REROOF (TEAR-OFF)</b> <b>CONCRETE DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER</b>								
<b>Assembly No.</b>	<b>Substrate</b>	<b>Vapor Barrier</b>		<b>Insulation</b>		<b>Roof Cover<sup>1</sup></b>		
		<b>Type</b>	<b>Attach</b>	<b>Base</b>	<b>Top</b>	<b>Base</b>	<b>Ply</b>	<b>Cap</b>
#9 (C-9)	Structural concrete, primed with ASTM D41 primer	Two or more, PRS Glass Ply IV or PRS Glass Ply VI	Hot asphalt	Min. 1/4 inch DensDeck Prime attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	None	APP-TA	(Optional) APP-TA	APP-TA
<b>Design Pressure (psf)</b>		<b>Base Insulation Attachment</b>						
-210.0		OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive in rows 12-inch o.c.						

**Footnote:**

1. For roof cover installation, refer to Table 1 above.

**Limitations and Installation (cont.):**

<b>TABLE 2 (CONTINUED): DERBIGUM MODIFIED BITUMEN – NEW CONSTRUCTION OR REROOF (TEAR-OFF)</b> <b>CONCRETE DECK, BONDED VAPOR BARRIER, BONDED INSULATION, BONDED ROOF COVER</b>								
<b>Assembly No.</b>	<b>Substrate</b>	<b>Vapor Barrier</b>		<b>Insulation</b>		<b>Roof Cover<sup>1</sup></b>		
		<b>Type</b>	<b>Attach</b>	<b>Base</b>	<b>Top</b>	<b>Base</b>	<b>Ply</b>	<b>Cap</b>
#10 (C-10)	Structural concrete, primed with ASTM D41 primer	Two or more, PRS Glass Ply IV or PRS Glass Ply VI	Hot asphalt	Min. 1/4 inch SECUROCK Gypsum-Fiber Roof Board or min. 1/2 inch DuraBoard attached with OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive	None	Derbigum GP or Derbigum XPS	(Optional) APP-TA	APP-TA
<b>Design Pressure (psf)</b>		<b>Base Insulation Attachment</b>						
-210.0		OMG OlyBond 500 or OMG OlyBond 500 Green Adhesive in rows 12-inch o.c.						

**Footnote:**

1. For roof cover installation, refer to Table 1 above.

**Note:** Keep the manufacturer's installation instructions at the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.